

Tetris Game

This is a simple implementation of the classic Tetris game using Python and Pygame.

Getting Started

These instructions will help you run the Tetris game on your local machine.

Prerequisites

You will need to have Python 3 and Pygame installed.

To install Pygame:

[Copy code](#)

```
pip install pygame
```

Running the Game

To run the game, simply execute the tetris.py file:

[Copy code](#)

```
python tetris.py
```

Use the arrow keys to move and rotate the falling tetromino shapes. The goal is to create complete rows at the bottom to clear them and score points. The game ends when the piled up blocks reach the top.

Game Controls

- Left Arrow - Move tetromino left
- Right Arrow - Move tetromino right
- Down Arrow - Speed up falling tetromino
- Up Arrow - Rotate tetromino clockwise
- Spacebar - Start/restart game after game over
- P - Pause/unpause game

Customising the Game

The game configuration like size, speed, etc can be edited by modifying the config dictionary in tetris.py. Refer to the code comments for details.

Conclusion

This project demonstrates a straightforward implementation of the classic Tetris game in Python. It covers core gameplay logic and mechanics like tetromino shapes, rotation, clearing lines, scoring, and game over conditions. While basic, it provides a solid foundation to build upon. Some ideas for enhancements:

- Improving graphics and visuals
- Adding animation and smooth rotations
- Implementing different difficulty levels
- Supporting additional control mechanisms like keyboards or touch
- Implementing a two player mode for head-to-head gameplay
- Adding powerups and special blocks
- Implementing a high score system
- Porting the game to mobile devices or web platforms

Overall, this project can serve as a nice code sample for beginners looking to create games with Python and Pygame. The simple yet engaging gameplay of Tetris also makes it an ideal choice for learning how to code game mechanics and logic.